

**TECHNICAL REVIEW DOCUMENT
FOR
OPERATING PERMIT 95OPGA028**

to be issued to:

Tri-State Generation and Transmission Association – Rifle Generating Station
Garfield County
Facility ID 0450057
Prepared by Geoffrey Drissel
April 1, 2004

I. Purpose

This document will establish the basis for decisions made regarding the applicable requirements, emission factors, monitoring plan and compliance status of emission units covered by the renewal operating permit proposed for this site. The original Operating Permit was issued May 1, 1999, and expires on May 1, 2004. This document is designed for reference during the review of the proposed permit by the EPA, the public, and other interested parties. The conclusions made in this report are based on information provided in the renewal application submitted April 7, 2003, previous inspection reports and various e-mail correspondence, as well as telephone conversations with the applicant. Please note that copies of the Technical Review Document for the original permit and any Technical Review Documents associated with subsequent modifications of the original Operating Permit may be found in the Division files as well as on the Division website at <http://www.cdphe.state.co.us/ap/Titlev.html>.

Any revisions made to the underlying construction permits associated with this facility made in conjunction with the processing of this operating permit application have been reviewed in accordance with the requirements of Regulation No. 3, Part B, Construction Permits, and have been found to meet all applicable substantive and procedural requirements. This operating permit incorporates and shall be considered to be a combined construction/operating permit for any such revision, and the permittee shall be allowed to operate under the revised conditions upon issuance of this operating permit without applying for a revision to this permit or for an additional or revised Construction Permit.

II. Source Description

This facility is a cogeneration plant defined under the standard industrial classification code of 4911. Electricity is generated with three natural gas fired combined cycle turbines equipped with duct burners to supplement the exhaust heat. The exhaust heat is used in a Heat Recovery Steam Generator (HRSG) to generate steam for a steam turbine that also generates electricity. The residual waste heat after the HRSG is used to make hot water for heating a greenhouse

complex. A fourth gas turbine is onsite to be used only for spare parts, no fuel hook-ups or power line are permitted. There are also two small natural gas fired boilers used for supplemental heat for the greenhouses. The facility is located at 0056 County Road 352 in the city of Rifle, Colorado. Garfield county is designated as attainment for all criteria pollutants. There are no affected states within 50 miles of the facility. The following Federal Class I areas are located within 100 kilometers of the facility: Flat Tops Wilderness Area, Maroon Bells-Snowmass Wilderness Area, and the West Elk Wilderness Area. The facility has certified that they are not subject to the Accidental Release provisions of section 112(r) of the Clean Air Act. Facility wide emissions are as follows:

<u>Pollutant</u>	<u>Current PTE (tpy)</u>	<u>2002 Actual (tpy)</u>
NOx	240.7	197.5
VOC	27.0	22.0
CO	114.4	95.5
PM	36.44	28.8
PM ₁₀	36.44	28.8

Potential emissions are based on emission limits in the current Operating Permit. Actual emissions are based upon a field inspection report submitted in March 2003. This source is required to provide an updated APEN for each emission unit in the event that emissions of NOx increase 5% or 50 tons per year and/or CO or VOC increase 5 tons per year above the level reported on the last APEN submitted to the APCD.

III. Discussion of Modifications Made:

Source Requested Modifications

The source requested that the following changes be made to the renewal Operating Permit:

- an increase in the turbine fuel use limitation
- a revision to the turbine emission factors for calculating annual emissions
- deletion of Unit S002, supplementary boilers
- a revision to the citation for the requirements of 40CFR60 Subpart Dc
- a revision to the Permit Shield summary to include MACT and CAM requirements
- an update of the insignificant activities list

Other Modifications

In addition to the changes requested by the source, the Division has included changes to make the permit more consistent with recently issued permits, including comments made by EPA on other Operating Permits, as well as to correct errors or omissions identified during review of this renewal.

The Division has made the following revisions, based on recent internal permit processing decisions and EPA comments, to the Rifle Station Operating Permit. These changes are as follows:

Page following Cover Page

- Monitoring and compliance periods and report and certification due dates are shown as examples. The appropriate monitoring and compliance periods and report and certification due dates will be filled in after permit issuance and will be based on permit issuance date. Note that the source may request to keep the same monitoring and compliance periods and report and certification due dates as were provided in the original permit. However, it should be noted that with this option, depending on the permit issuance date, the first monitoring period and compliance period may be short (i.e. less than 6 months and less than 1 year).
- The information regarding postmark dates following the monitoring and compliance report due dates was revised.

Section I - General Activities and Summary

- The language in Conditions 1.4 and 1.5 was changed to reflect the revised numbering of the General Conditions.
- The language in Condition 3.1 was revised to more appropriately address the PSD status of the source.
- Added Section 5 for compliance assurance monitoring (CAM); note that no emission units are subject to CAM.

Section II - Specific Permit Terms

- The language regarding the presumption of compliance with the opacity standard if natural gas is used as fuel was updated to reflect the current version.
- The language regarding “credible” evidence was updated to reflect the current version.

- Reference to a specific ASTM method was deleted.

Section III – Permit Shield

- The Permit Shield citation was revised.
- The title for Section 1 was changed from “Specific Conditions” to “Specific Non-Applicable Requirements” and a new section 3 was added for subsumed (streamlined) conditions. Note that there were no streamlined conditions.
- Based on comments made by EPA on another permit, the following statement was added after the introductory sentence in Section 1 “This shield does not protect the source from any violations that occurred prior to or at the time of permit issuance”.
- In addition, the following phrase “In addition, this shield does not protect the source from any violations that occur as a result of any modification or reconstruction on which construction commenced prior to permit issuance” was added to the end of the introductory paragraph in Section 1.
- Based on comments made by EPA on another permit, the following phrase was added to the beginning of the introductory sentence “Based upon the information available to the Division and supplied by the applicant.”

Section IV - General Conditions

- Added a reference to the State-Only status of the affirmative defense provision of the Common Provisions, General Condition 3.
- Added an “and” between the Reg 3 and C.R.S. citations in General Condition 4 (compliance requirements).

Appendices

- Appendix B and C were revised to reflect the current versions.